

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Identifying occupational health hazards among healthcare providers and ancillary staff in Ghana: a scoping review protocol
AUTHORS	Tawiah, Philip; Baffour-Awuah, Alberta; Appiah-Brempong, Emmanuel; Afriyie-Gyawu, Evans

VERSION 1 – REVIEW

REVIEWER	Rai, Rajni Curtin University, School of Population Health
REVIEW RETURNED	25-Oct-2021

GENERAL COMMENTS	<p>Manuscript: Protocol for a scoping review study to identify occupational health hazards among healthcare providers and ancillary staff in Ghana (BMJ Open)</p> <p>This is an interesting manuscript that describes the protocol addressing a significant topic: occupational health hazards among health workers, which will help guide policy change in Ghana.</p> <p>The following are my comments and suggestions:</p> <p>Introduction: Page 4, lines 50-56. "All these review studies described above mostly considered primary studies on healthcare providers and not ancillary workers in the healthcare industry. Meanwhile, ancillary staff may be more exposed than healthcare". I would suggest that the authors refer to the WHO classification of healthcare workers available in the following link: https://www.who.int/hrh/statistics/Health_workers_classification.pdf Ancillary staff fall in the category of Elementary occupations. The review done by Rai et al. included all categories of healthcare workers and there are several studies that looked at all categories of healthcare workers including elementary occupations such as cleaners, housekeeping personnel etc. Hence, I would suggest re-phrasing of this sentence and also providing a clear definition of who the authors consider to be healthcare providers and ancillary staff since the WHO healthcare worker classification includes a broad range of occupations.</p> <p>Study Rationale: The authors have written that Ghana has a policy and guidelines for occupational health and safety for the healthcare industry workforce. Please provide the reference for this policy so that the readers can refer to it.</p> <p>Methods and analysis: Identifying the research question: The authors state that the research question was developed in consultation with key stakeholders. Please indicate who these stakeholders are.</p>
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	<p>The authors have 3 other questions in addition to the main research question: level of knowledge on occupational health hazards, the predisposing factors and level of utilization of preventative measures. I would suggest that it would also be important to look at “what are the available control/preventative measures for the health workers to use” in addition to looking at the level of utilization of these measures.</p> <p>Identifying relevant studies: Lines 31 to 36: The authors state that the search strategy will be developed with input from “research teams, key stakeholders and knowledge users”. Please indicate who the key stakeholders and knowledge users are. If the authors are intending to develop the search strategy by consulting all the above people, please indicate how this will be done. Also, the final line states that “The final search strategy will be blinded to all stakeholders”. Why is this being done?</p> <p>Study selection: I would suggest reconstruction of this paragraph. The authors have described the process of study selection first and then described the inclusion and exclusion criteria. Describing the inclusion and exclusion criteria first makes it easier for the reader to follow the process. Since this is an article describing the study protocol, I would also suggest listing clearly in numerical form the inclusion and exclusion criteria. (e.g., Inclusion criteria: 1) studies on health providers and ancillary staff, 2) studies on occupational exposures to biological and non-biological hazards etc.).</p> <p>Data summary and synthesis of results: I would suggest that the authors refer to the following article on the PRISMA-ScR reporting on scoping review https://www.acpjournals.org/doi/pdf/10.7326/M18-0850</p> <p>It provides a 22 item checklist for reporting scoping reviews. It would be consistent with the available literature on scoping reviews if this protocol was followed by the authors.</p> <p>Consultation: Please indicate how the consultation will be carried out. Will it be through focus groups or interviews? Will the results of these consultations be reported in the final article?</p> <p>Appendix II: Table 2: Review considerations: “Utilization of universal precautions” - I would suggest this to be changed to “use of control/preventative measure” since all types of occupational hazards are included in the review and not only biological hazards. I would also suggest to the authors to edit the whole article for grammar and typos.</p>
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REVIEWER	Ridge, Laura New York University
REVIEW RETURNED	28-Oct-2021

GENERAL COMMENTS	<p>i believe this study is important as the authors' argument that country-specific reviews are needed, particularly among LMICs, is 100% correct. I had a few minor comments:</p> <p>1. The question, "What is the level of knowledge on occupational health hazards?" should be refined. Knowledge among who? Presumable healthcare workers (HCWs), but then that should be specified. Also, what types of knowledge are you focused on? Are you concerned HCWs aren't aware of the risks they face, or that they don't know how to protect themselves? Or that once they've been exposed, that they don't know next steps? Perhaps all of the above, but perhaps not, which is why the question must be refined.</p>
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	<p>2. Seven databases plus grey literature is a LOT. I would consider cutting a bit.</p> <p>3. I had to put that the protocol didn't allow for replication because the search terms are not included. The terms should be included in your revisions because without them it's very difficult to assess the quality of your search. The terms provided in Appendix 1 seem well-chosen to me if you're willing to commit to using those.</p> <p>4. It's unusual to have no restrictions on publication date, especially when you're trying to describe a phenomenon (occupational exposures) as it is now. Please either justify, and explain how an article from 1978 (for example) would help you answer your research question, or consider adding a restriction.</p> <p>5. A few sentences clarifying why a scoping review vs a systematic review was chosen would be great.</p> <p>I look forward to reading your scoping review. This topic is very important.</p>
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VERSION 1 – AUTHOR RESPONSE

*** Response to Reviewer 1, Dr Rajni Rai, Curtin University

1. The authors have revised the sentence and referred to the WHO classification of health workers. However, by my sentence, I meant I did not chance on primary studies included in those reviews that had only ancillary staff (workers in elementary occupations) as study participants. A clear definition of healthcare provider and ancillary staff have been defined in the introductory section.
2. The reference has been cited.
3. The stakeholders are the faculty in the occupational health and safety department of tertiary institutions and key employees of the Ghana Health Service. The use of control/preventive measures for health workers has been included in the research questions.
4. The stakeholders are key workers of the Ghana Health Service, occupational health faculty members while knowledge users are employees of the Ghana Health Service. The consultations of these key stakeholders will be done through interviews. Blinding will be done because some stakeholders may have published articles on occupational health and may influence the selection of articles for the review.
5. The section has been reconstructed to make it easier for the reader to follow the process.
6. PRISMA-ScR guidelines have been referred and the findings of the review will be reported according to the guidelines.
7. The consultations will be carried through interviews and the results of the consultations will not be reported in the final work.
8. Appendix II have been revised to 'use of control/preventative measure'.
9. Authors have read through to edit grammar and typos.

*** Response to Reviewer 2, Dr Laura Ridge, New York University

1. The research question, "What is the level of knowledge on occupational health hazards?" has been refined to include healthcare workers. It has also been expanded to include knowledge on control/preventive measures.
2. I have carried out a trial search and it will be manageable.
3. I have revised the supplemental file to include the search terms, to allow for easy replication.
4. The final date of the search is known, so I have clarified it.
5. The manuscript has been revised to clarify why the scoping review was chosen over the systematic review.

VERSION 2 – REVIEW

REVIEWER	Ridge, Laura New York University
REVIEW RETURNED	13-Dec-2021

GENERAL COMMENTS	<p>*Thank you for your responses to my previous comments</p> <p>*Since you have four research questions, I recommend your data extraction tool contain a column for each question to discuss findings. Many included manuscripts will not address all four questions, and since you may find in your final manuscript you want to present the findings by question, and this will make it much easier to do so. It may also enable you to answer questions like, "which of these questions are the most/least addressed by the literature?" well.</p> <p>*It's unclear from your inclusion/exclusion criteria whether or not you will include qualitative studies on this topic, since they rarely use language like "cross-sectional", etc. I would encourage you to do so, but you may have reasons to choose not. Just please make it clear to the reader what your stance is.</p>
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VERSION 2 – AUTHOR RESPONSE

Response to Peer Review Comments

*** Response to Reviewer 2, Dr Laura Ridge, New York University

1. Referring to Appendix II, two tables are already created for data extraction; the second table will be used to cater for the review questions.
2. The review will exclude qualitative studies. Subsequently, it has been listed as one of the exclusion criteria in the manuscript.